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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,958	01/03/2006	Jorg Sturzebecher	50125/102001	4120

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EXAMINER	
SZNAIDMAN, MARCOS L	
ART UNIT	PAPER NUMBER
1612	

NOTIFICATION DATE	DELIVERY MODE
06/11/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentadministrator@clarkelbing.com

Office Action Summary	Application No.	Applicant(s)	
	10/540,958	STURZEBECHER ET AL.	
	Examiner	Art Unit	
	MARCOS SZNAIDMAN	1612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 April 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *46-91* is/are pending in the application.

4a) Of the above claim(s) *49-69,71-73,75-89 and 91* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *46-48,70,74 and 90* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

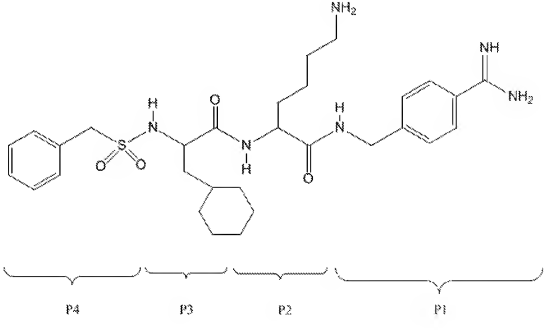
This office action is in response to applicant's reply filed on April 17, 2009.

Status of Claims

Amendment of claims 46, 48 and 74; and addition of claims 90 and 91 is acknowledged.

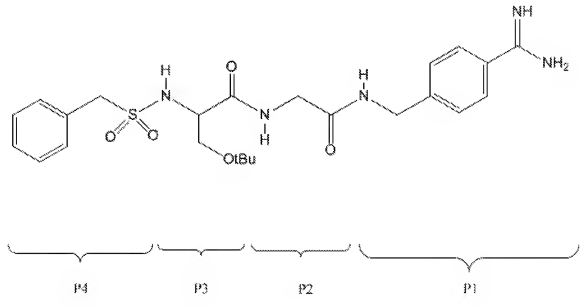
Claims 46-91 are currently pending and are the subject of this office action.

In the reply of August 18, 2008, Applicant elected Group I (Claims 46-74, 76 and 88-89) and the species for compounds of formula I corresponding to compound 53 (Table 3 on page 53 of the specification) and corresponding to the following structure:



Which was encompassed by the following claims: 46-48, 59, 63-65, 70, and 74.

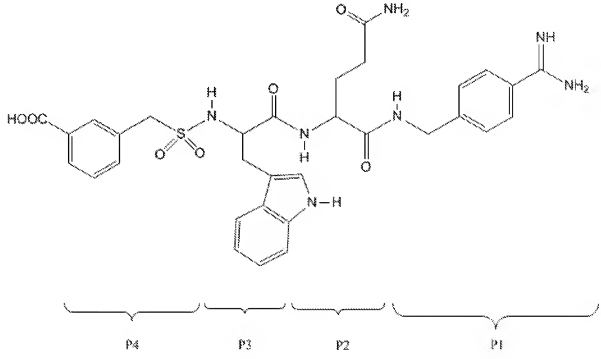
Since the above species was found free of prior art, in the Office Action mailed on November 17, 2008 the examination was expanded to the following species: O-(1,1-dimethylethyl)-N-[(phenylmethyl)sulfonyl]-D-seryl-N-[[4-(aminoiminomethyl)phenyl]methyl]-Glycinamide (CAS# 380415-13-4), which corresponds to the following structure:



which was encompassed by the following claims: 46-48, 59, 63, 65, 70 and 74.

Due to Applicant's amendment of claim 46, none of the above species longer reads on any of the pending claims, so the above species are withdrawn from examination.

As a consequence the examination was expanded to the following species: N-[[3-carboxyphenyl)methyl]sulfonyl]-D-tryptophyl-N1-[[4-(aminoiminomethyl)phenyl]methyl]-L-Glutamamide (CAS# 446845-73-4 for the neutral compound and 446845-74-5 for the trifluoroacetate salt), which corresponds to the following structure:



which reads on the following claims: 46-48, 70, 74 and 90 of Group I.

Claims 46-48, 70, 74 and 90 are under examination.

Priority

The present application is a 371 of PCT/EP04/00247 filed on 01/15/2004.

Applicant claims priority to foreign application: GERMANY 103 01 300.8 filed on 01/15/2003. However, should applicant desire to obtain the benefit of foreign priority under 35 U.S.C. 119(a)-(d) prior to declaration of an interference, a certified English translation of the foreign application must be submitted in reply to this action. 37 CFR 41.154(b) and 41.202(e).

Failure to provide a certified translation may result in no benefit being accorded for the non-English application. As a consequence, the priority date for this application is considered: 01/15/2004.

Rejections and/or Objections and Response to Arguments

Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated (Maintained Rejections and/or Objections) or newly applied (New Rejections and/or Objections, Necessitated by Amendment or New Rejections and/or Objections not Necessitated by Amendment). They constitute the complete set presently being applied to the instant application.

Prior Art: counterpart

WO 2002/062829 is the PCT counterpart to US 2004/0087511.

WO 2002/062829 is prior art under U.S.C. 102 (b) as a result of its August 15, 2002 publication date.

Because WO 2001/096366 and US 2004/0087511 appear to have identical disclosures, the US publication (US 2004/0087511) is being used as a translation of WO 2002/062829 PCT.

While any reference hereinafter to column and line numbers will be based upon the US patent disclosure, such reference should be interpreted as referring to the corresponding disclosure of the aforementioned PCT counterpart.

Claim Rejections - 35 USC § 102 (New Rejection Necessitated by Amendment)

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 46-48, and 70 are rejected under 35 U.S.C. 102(b) as being anticipated by Shiraishi et. al. (US 2004/0087511 referring to WO 2002/062829, see above discussion under prior art: counterpart).

Claims 46-48 recite a method of inhibiting plasma kallikrein and/or factor XIa and/or factor XIIa, said method comprising administering to a patient N-[[3-carboxyphenyl)methyl]sulfonyl]-D-tryptophyl-N1-[[4-(aminoiminomethyl)phenyl]methyl]-L-Glutamamide (expanded species representing a compound of formula I being examined, from now on Compound A), wherein said above compound inhibits plasma kallikrein, factor XIa, and/or factor XIIa.

For claims 46-48, Shiraishi teaches a method for inhibiting activity against blood coagulation factor VIIa with peptide derivatives of general formula I (see paragraphs [0013] and [0016], wherein the peptide could be compound A (see paragraph [0166], second compound).

Shiraishi is silent regarding "inhibiting plasma kallikrein and/or factor XIa and/or factor XIIa". However the recitation has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See In re Hirao, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and Kropa v. Robie, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Alternatively, even if one were to give some weight to the preamble, the claimed limitation "inhibiting plasma kallikrein and/or factor XIa and/or factor XIIa" will necessarily be present in the method described by Shiraishi, since the same compound (Compound A) is administered to the same population. In other words, products of

identical or similar composition cannot exert mutually exclusive properties when administered under the same circumstances.

The phrase: "wherein said compound A inhibits plasma kallikrein, factor XIa, and/or factor XIIa." is not given any patentable weight because: the wherein clause represents the intended result of the process steps positively recited. See MPEP 2111.04: In Hoffer v. Microsoft Corp., 405 F.3d 1326, 1329, 74 USPQ2d 1481, 1483 (Fed. Cir. 2005), the court held that when a "whereby' clause states a condition that is material to patentability; it cannot be ignored in order to change the substance of the invention." Id. However, the court noted (quoting Minton v. Nat 'l Ass 'n of Securities Dealers, Inc., 336 F.3d 1373, 1381, 67 USPQ2d 1614, 1620 (Fed. Cir. 2003)) that a "whereby clause in a method claim is not given weight when it simply expresses the intended result of a process step positively recited.'" Id.

In the present case, Shiraishi et. al. teach the active steps of the instantly claimed invention, e.g., administration of the same compound (Compound A) to the same patient population.

Claim 70 further limits claim 46, wherein the method of claim 46 is "for preventing blood coagulation at synthetic surfaces."

Although Shiraishi does not explicitly teach that the method can be used for preventing blood coagulation at synthetic surfaces, the claimed limitation does not appear to result in a manipulative difference between the prior art method since the

claimed limitation appears to suggest an intended use of the claimed method does not appear to further limit the patient population or provide any additional steps.

Claim Rejections - 35 USC § 103 (New Rejection Necessitated by Amendment)

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 74 and 90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiraishi et. al. (US 2004/0087511 referring to WO 2002/062829, see above discussion under prior art: counterpart) as applied to claims 46-48 and 70 above, and further in view of Akers (Journal of Pharmaceutical sciences (2002) 91:2283-2300).

Claim 74 further limits claim 46, wherein compound A is administered in parenteral or enteral form. Claim 90 further limits claim 74, wherein parenteral form is intraarterial, intravenous, intramuscular or subcutaneous form.

Shiraishi teaches all the limitations of claims 74 and 90, except for the form of administration (parenteral or enteral). However, Akers teaches that parenteral formulations are well known in the art of drug delivery (see title for example) and in particular intravenous delivery (see page 2284, line 5).

At the time of the invention, it would have been *prima facie* obvious for a person of ordinary skill in the art to further administer compound A as taught by Akers, since parenteral (e.g. Intravenous) administration of known drugs is very well known in the art,

thus resulting in the practice of claims 74 and 90 with a reasonable expectation of success.

Withdrawn Rejections and/or Objections

Claims rejected under 35 USC 112, second paragraph.

Due to the withdrawal of claim 59 and due to Applicant's amendment of claim 74 the rejection is now moot.

Rejection under 35 USC 112, second paragraph is withdrawn.

Claims rejected under 35 USC 102 (b)

Due to Applicant's amendment of claim 46, the 102 rejection is now moot.

Rejection under 35 USC 102(b) is withdrawn.

However, based on new prior art a new 102(b) rejection (Necessitated by Amendment) was applied (see above)

Conclusion

No claims are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARCOS SZNAIDMAN whose telephone number is

(571)270-3498. The examiner can normally be reached on Monday through Thursday 8 AM to 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frederick F. Krass can be reached on 571 272-0580. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MARCOS SZNAIDMAN/
Examiner, Art Unit 1612
June 2, 2009

/Frederick Krass/

Supervisory Patent Examiner, Art Unit 1612